

ADDENDUM J.2
ACTIVE LIFE CONTINGENCY PLAN

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J CONTINGENCY PLAN ACTIVE LIFE

The requirements in this Contingency Plan are applicable to waste that is regulated by [WAC 173-303](#) (e.g. dangerous or mixed waste). Pursuant to [WAC 173-303-350](#)(2), and according to the provisions of this Addendum J.2, the Hanford Facility Permit WA7890008967 (Permit) Attachment 4, *Hanford Emergency Management Plan* (DOE/RL-94-02), and the Building Emergency Plan specific to Integrated Disposal Facility (IDF) will be amended to incorporate requirements of [WAC 173-303-350](#) and [WAC 173-303-360](#) within 30 days of the effective date of the permit.

The requirements in Addendum J.2 that are applicable to waste that is regulated by [WAC 173-303](#) (e.g. dangerous waste or mixed waste) for the receipt and disposal of dangerous waste as defined in [WAC 173-303-040](#) will be applicable for the "Active Life" of the IDF. Active Life of a facility as defined by [WAC 173-303-040](#) means "the period from the initial receipt of dangerous waste at the facility until the department receives certification of final closure." When dangerous waste is received at the IDF, the requirements in Addendum J.1, pre-active life, are no longer applicable, and requirements in this Addendum J.2 are applicable and IDF will comply with the requirements in the Contingency Plan, Addendum J.2 of the permit.

Table J.1 identifies the sections of the unit-specific building emergency plan written to meet [WAC 173-303-350](#)(3) contingency plan requirements identified in this addendum. In addition, Section 12.0 of the unit-specific IDF building emergency plan is written to meet [WAC 173-303-350](#) and [WAC 173-303-360](#) requirements. Copies of Permit Attachment 4, *Hanford Emergency Management Plan* (DOE/RL-94-02) and the building emergency plan are located and maintained on the Hanford Facility and available as identified in Section J.6. Revisions to Addendum J.2 require a Permit modification subject to [WAC 173-303-830](#) and Permit Condition I.C.3.

The IDF building emergency plan also serves to satisfy a broad range of other requirements (e.g., Occupational Safety and Health Administration standards [[29 CFR 1910](#)], *Toxic Substance Control Act of 1976* [[40 CFR 761](#)] and U.S. Department of Energy Orders). Therefore, revisions made to portions of this unit-specific building emergency plan that are not governed by the requirements of WAC 173-303 will not be considered as a modification subject to [WAC 173-303-830](#) or Permit Condition I.C.3.

Table J.1 Hanford Facility Documents Containing Contingency Plan Requirements of [WAC 173-303-350](#)(3)

Requirement	Permit Attachment 4, Hanford Emergency Management Plan (DOE/RL-94-02)	Building Emergency Plan ¹ (HNF-IP-0263-IDF)	Addendum J
-350(3)(a) - A description of the actions which facility personnel must take to comply with this section and WAC 173-303-360	X ² Section 1.3.4	X ² Sections 7.1, 7.2 through 7.2.5, and 7.3 ³ Sections 4.0, 8.2, 8.3, 8.4, and 11.0	X ² Sections J.3.1, J.3.2 through J.3.2.5, and J.3.3 ³ Sections J.3, J.3.4, J.3.5, J.3.6, and J.5
-350(3)(b) - A description of the actions which shall be taken in the event that a dangerous waste shipment, which is damaged or otherwise presents a hazard to the public health and the environment, arrives at the facility, and is not acceptable to the owner or operator, but cannot be transported pursuant to the requirements of WAC 173-303-370(5) , Manifest system, reasons for not accepting dangerous waste shipments	X ² Section 1.3.4	X ^{2,4} Section 7.2.5.1	X ^{2,4} Section J.3.2.5.1

Requirement	Permit Attachment 4, Hanford Emergency Management Plan (DOE/RL-94-02) :	Building Emergency Plan ¹ (HNF-IP-0263-IDF)	Addendum J
<u>-350(3)(c)</u> - A description of the arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services as required in <u>WAC 173-303-340(4)</u> .	X Sections 3.2.3, 3.3.1, 3.3.2, 3.4, 3.4.1.1, 3.4.1.2, 3.4.1.3, 3.7, and Table 3-1		
<u>-350(3)(d)</u> - A current list of names, addresses, and phone numbers (office and home) of all persons qualified to act as the emergency coordinator required under <u>WAC 173-303-360(1)</u> . Where more than one person is listed, one must be named as primary emergency coordinator, and others must be listed in the order in which they will assume responsibility as alternates		X ⁵ Sections 3.1 and 13.0	X ⁵ Sections J.2 and J.7
<u>-350(3)(e)</u> - A list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems, and decontamination equipment), where this equipment is required. This list must be kept up to date. In addition, the plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.	X	J X K Section 9.0	L X M Section J.4
N <u>-350(3)(f)</u> - An evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe the signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes.	X ⁶ Figure 7-3 and Table 5-1	X ⁷ Section 1.5	X ⁷ Section J.1 and facility operating record

An 'X' indicates requirement applies.

¹ Portions of Permit Attachment 4, *Hanford Emergency Management Plan* (DOE/RL-94-02) not enforceable through Appendix A of that document are not made enforceable by reference in the building emergency plan.

² Permit Attachment 4, *Hanford Emergency Management Plan* (DOE/RL-94-02) contains descriptions of actions relating to the Hanford Site Emergency Preparedness System. No additional descriptions of actions are required at the site level. Other credible scenarios that exist at IDF WMU and all emergency procedures at the IDF WMU that are different from those in Attachment 4, must be identified in the IDF WMU BEP.

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⁵ Emergency Coordinator names and home telephone numbers are maintained with the Patrol Operations Center (telephone number 373-0911) in accordance with Permit Condition II.A.3 and will be updated, at a minimum, monthly.

⁶ The Hanford Facility (site wide) signals are provided in Attachment 4, table 5.1. IDF specific communications equipment and warning systems are provided in section J.4.3.

⁷ Evacuation routes for occupied buildings surrounding the DWMU are posted on information boards within buildings.

J.1 Building Evacuation Routing

Evacuation routing maps will be maintained in the facility operating record and provide identification of the primary and secondary staging areas and a general layout of the IDF. Alternate evacuation routes will be used on a case-by-case basis based on meteorological conditions at the time of the event.

J.2 Building Emergency Director

The Incident Command System (ICS) and staff, with supporting on-call personnel, will meet the requirements of the Emergency Coordinator as identified in [WAC 173-303-360\(1\)](#). The Building Emergency Director/Building Warden (BED/BW) will direct emergency response until the Incident Commander (IC) arrives. The Incident Command System (ICS) and staff with supporting on-call personnel, fulfill the responsibilities of the Emergency Coordinator as discussed in [WAC 173-303-360](#). The BED/BW becomes a member of the ICP and functions under the direction of the IC. In this role, the BED/BW will continue to manage and direct IDF operations. During events, IDF personnel will perform response duties under the direction of the BED. The Incident Command Post (ICP) will be managed by the senior Hanford Fire Department official, unless the event is determined to be primarily a security event, in which case the Hanford Fire Department and Hanford Patrol will operate under a unified command system with Hanford Patrol making all decisions pertaining to security. These individuals will be designated as the IC, and as such, have the authority to request and obtain any resources necessary for protecting people and the environment.

A listing of BEDs by title, work location, and work telephone numbers will be contained in Section J.7.1. The BED will be on the premises or will be available through an 'on call' list 24 hours a day. Names and home telephone numbers of the BEDs will be available from the Patrol Operations Center (POC) in accordance with Permit Condition II.A.3.

J.3 Implementation of the Contingency Plan

In accordance with [WAC 173-303-360\(2\)\(b\)](#), whenever there is a release, fire, or explosion, the BED/BW will ensure that trained personnel identify the character, exact source, amount, and areal extent of any released materials. Identification of waste can be made by activities that can include, but are not limited to visual inspection of containers, sampling activities in the field, reference to inventory records, or by consulting with facility personnel. During the emergency, if samples of materials are required, sampling will be performed by qualified personnel and the samples will be analyzed as appropriate.

The BED will use the following emergency procedures of [WAC 173-303-360\(2\)](#) to implement an emergency event:

“If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment, he must report his findings as follows:

(i) If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and

(ii) He must immediately notify the department and either the government official designated as the on-scene coordinator, or the National Response Center (using their 24-hour toll free number (800) 424-8802).”

As soon as possible, after stabilizing event conditions, the BED will determine, in consultation with the site contractor environmental single point-of-contact, if notification to the Washington State Department of Ecology (Ecology) is needed to meet [WAC-173-303-360\(2\)\(d\)](#) reporting requirements. Additional information is found in Permit Attachment 4, *Hanford Emergency Management Plan* (DOE/RL-94-02), Section 4.2.

If review of all available information does not yield a definitive assessment of the danger posed by the incident, a worst-case condition will be presumed and appropriate protective actions and notifications will be initiated. The BED will be responsible for initiating any protective actions based on their best judgment of the incident.

The BED will assess each incident to determine the response necessary to protect the personnel, facility, and the environment. If assistance from Hanford Patrol, Hanford Fire Department, or ambulance units is required, the Hanford Emergency Response Number (911 from site office phones/373-0911 from cellular phones) will be used to contact the Patrol Operations Center and request the desired assistance. To

request other resources or assistance from outside the IDF, the Patrol Operations Center business number is used (373-0911).

J.3.1 Protective Actions Responses

Protective action responses are discussed in the following sections. The steps identified in the following description of actions do not have to be performed in sequence because of the unanticipated sequence of incident events.

J.3.1.1 Evacuation

If an evacuation is ordered or the evacuation siren sounds in the area of the IDF, personnel will proceed to the staging area.

The BED or staging area manager will direct the evacuation; however, to ensure that evacuations will be conducted promptly and safely, all personnel will be familiar with the evacuation procedure.

Area evacuations are rapid or controlled and the differences between them are pointed out in the following steps. When possible, these steps will be performed concurrently.

AREA EVACUATION PROCEDURE
Halt any operations or work and place equipment and structures in a safe condition. Use emergency shutdown procedures for rapid evacuation.
Use whatever means are available (portable radios, bullhorns, runners, etc.) to pass the evacuation information to personnel.
Evacuate personnel to the staging area; group personnel as follows: potentially contaminated protective clothing, keys immediately available for vehicles, and those needing rides. Assist personnel that are temporary/permanently disabled.
Conduct personnel accountability. If unable to account for personal, report personnel accountability results to the Hanford Emergency Operations Center (Hanford-EOC).
Inform IC of any potentially affected personnel (i.e., injured, contaminated, exposed, etc.) once the IC arrives at the ICP.
Relay pertinent evacuation information (routes, destination etc.) to drivers.
Dispatch vehicles as soon as the vehicles are loaded.
Report status to the Hanford-EOC, request additional transportation if required, and report if any personnel remain who are performing late shutdown duties.

J.3.1.2 Take Cover

When the Take Cover Alarm is activated, personnel will take cover in the nearest suitable building or trailer.

A message followed by the Take Cover siren will be transmitted over the area emergency sirens. The following actions will be taken or considered:

- Shut doors and windows and wait for further instructions.
- Secure ventilation system.
- Follow normal exit procedures from radiological areas.
- Lock up classified documents and prepare for a possible evacuation.
- Report your location to the Accountability Aid or the BED.
- Accountability Aides will provide accountability status to the Staging Area Manager for IDF personnel during an event.
- Inform IC of any potentially affected personnel (i.e., injured, contaminated, exposed, etc.) once the IC arrives at the ICP.

J.3.2 Response to Facility Operations Emergencies

Whenever there is an imminent or emergency situation, the BED will review the site wide and IDF emergency response procedure(s) and, as required, categorize and/or classify the event. If necessary, the BED will initiate area protective actions and Hanford Site Emergency Response Organization activation. The steps identified in the following description of actions do not have to be performed in sequence because of the unanticipated sequence of incident events.

J.3.2.1 Loss of Utilities

The only loss of utilities is electrical. Loss of electricity does not constitute an emergency, but will be restored as soon as possible. Electricity supplies power to the sump pumps used to remove accumulated leachate from the primary and secondary liners. The loss of water, ventilation, steam, air, and vacuum are not applicable to the IDF.

J.3.2.2 Major Process Disruption/Loss of Plant Control

This is not applicable to IDF because operations at IDF do not include a major process.

J.3.2.3 Pressure Release

Personnel will immediately evacuate the hazard area. In the event of any injuries, personnel will immediately call 911 from a Hanford site phone or 373-0911 from cellular phone for medical response.

J.3.2.4 Fire and/or Explosion

In the event of a fire, the discoverer will activate a fire alarm (pull box); call 911 from site office phones/373-0911 from cellular phones or verify that the Hanford Emergency Response Number has been called.

- Unless otherwise instructed, personnel will evacuate the area/building by the nearest safe exit and will proceed to the designated staging area for accountability.
- On actuation of the fire alarm, ONLY if time permits, personnel will shut down equipment and secure waste. The alarm automatically signals the Hanford Fire Department.
- The BED will proceed directly to the ICP, obtain all necessary information pertaining to the incident, and send a representative to meet Hanford Fire Department
- The BED will provide a formal turnover to the IC when the IC arrives at the ICP.
- The BED will inform the Hanford Site Emergency Response Organization as to the extent of the emergency (including estimates of dangerous waste and mixed waste quantities released to the environment).
- If operations are stopped in response to a fire, the BED will ensure that systems are monitored for leaks, pressure buildup, gas generation, and ruptures.
- Hanford Fire Department firefighters will extinguish the fire as necessary.

J.3.2.5 Hazardous Material, Dangerous and/or Mixed Waste Spill

Spills can result from many sources including process leaks, container spills or leaks, damaged packages or shipments, or personnel error. Spills of mixed waste are complicated by the need to deal with the extra hazards posed by the presence of radioactive materials.

- The discoverer notifies the BED and initiates SWIMS response:
 - Stops work
 - Warns others in the vicinity
 - Isolates the area
 - Minimizes the exposure to the hazards
 - Requests the BED Secure ventilation

- The BED will determine if emergency conditions exist requiring response from the Hanford Fire Department based on classification of the spill and injured personnel, and evaluates need to perform additional protective actions.
- If the Hanford Fire Department resources are not needed, the spill will be mitigated with resources identified in Section J.4.5 and proper notifications are made.
- If the Hanford Fire Department resources are needed, the BED will call 911 from site office phones/373-0911 from cellular phones.
- The BED will send a representative to meet the Hanford Fire Department.
- The BED will provide a formal turnover to the IC when the IC arrives at the ICP.
- The BED will inform the Hanford Site Emergency Response Organization as to the extent of the emergency (including estimates of dangerous waste and mixed waste quantities released to the environment).
- If operations are stopped in response to the spill, the BED will ensure that systems are monitored for leaks, pressure buildup, gas generation, and ruptures.
- Hanford Fire Department will stabilize the spill. Damaged or Unacceptable Shipments

During the course of receiving dangerous or mixed waste at IDF, an unanticipated event could be discovered resulting in a conformance issue concerning the waste. Damaged or unacceptable shipments resulting from onsite transfers are not subject to [WAC 173-303-370](#) however conformance issues will be resolved in order to maintain proper records.

The following actions will be taken to resolve the conformance issue:

- Operations management will be notified of the damaged or unacceptable waste to be received.
- If the conformance issue results in a spill or release, actions described in Section J.3.2.4 will be taken
- The generating organization will be notified of the conformance issue
- An operations representative, in conjunction with the generating organization, will determine the course of action to resolve the conformance issue.

J.3.3 Prevention of Recurrence or Spread of Fires, Explosions, or Releases

The BED, as part of the ICP, will take the steps necessary to ensure that a secondary release, fire, or explosion does not occur. The BED will take measures, where applicable, to stop processes and operations, collect and contain released waste, and remove or isolate containers. The BED will also monitor for leaks, pressure buildups, gas generation, or ruptures in valves, pipes or other equipment, whenever this is appropriate.

J.3.3.1 Incident Recovery and Restart of Operations

A written recovery plan is needed following an event when the recovery actions could result in further risk to human health or the environment. This written recovery plan will be developed when necessary in accordance with Permit Attachment 4, *Hanford Emergency Management Plan* (DOE/RL-94-02), Section 9.2. Permit Attachment 4, *Hanford Emergency Management Plan* (DOE/RL-94-02), Section 5.1, also discusses different reports to outside agencies.

If the contingency plan was implemented according to Section J.3, Ecology will be notified before operations can resume [[WAC 173-303-360](#)(2)(j)]. This notification must include the following statements:

No waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed. [WAC 173-303-360](#)(2)(i); and

All emergency equipment listed in the contingency plan is cleaned, and fit for its intended use before operations are resumed, [WAC 173-303-360](#)(2)(i)(ii).

The notification required by [WAC 173-303-360](#)(2)(j) may be made via telephone conference and documentation of the notification will be included in the IDF WMU operating record. Additional information that Ecology requests will be included in the required 15-day report identified in Section J.5 required by [WAC 173-303-360](#)(2)(k).

For emergencies not involving activation of the Hanford-EOC, the BED will ensure that conditions are restored to normal before operations will resume. If the Hanford Site Emergency Response Organization was activated and the emergency phase is complete, a special recovery organization could be appointed at the discretion of RL to restore conditions to normal. This process is detailed in RL and contractor emergency procedures. The makeup of this organization depends on the extent of the damage and the effects. The onsite recovery organization will be appointed by the appropriate contractor's management.

J.3.4 Incompatible Waste

After an emergency, the BED or the onsite recovery organization will ensure that no waste that may be incompatible with the released material is treated, stored, or disposed of until cleanup procedures are completed pursuant to [WAC 173-303-360](#)(2)(i). Clean up actions will be taken by IDF personnel or other assigned personnel. Permit Attachment 4, *Hanford Emergency Management Plan*, (DOE/RL-94-02), Section 9.2.3, describes actions to be taken.

Waste from cleanup activities will be designated and managed as newly generated waste. A field check for compatibility will be performed before storage, as necessary. Incompatible wastes will not be placed in the same container and will follow the requirements of [WAC 173-303-630](#)(9). Containers of waste will be placed in approved storage areas appropriate for their compatibility class.

If incompatibility of waste was a factor in the incident, the BED or the onsite recovery organization will ensure that the cause is identified and corrected.

J.3.5 Post Emergency Equipment Maintenance and Decontamination

The BED will ensure that all emergency equipment listed in the J.4 is cleaned and fit for its intended use before operations are resumed in accordance with [WAC 173-303-360](#)(2)(i)(ii). Depleted stocks of neutralizing and absorbing materials will be replenished; protective clothing will be cleaned or disposed of and restocked, etc.

All equipment used during an incident will be decontaminated (if practicable) or disposed of as spill debris. Decontaminated equipment will be checked for proper operation before storage for subsequent use. Consumable and disposed materials will be restocked. Fire extinguishers will be replaced.

J.4 Emergency Equipment

Emergency resources and equipment for the IDF is presented in this section.

J.4.1 Fixed Emergency Equipment

FIXED EMERGENCY EQUIPMENT		
Type	Location	Capability
Three 6-inch fire hydrants	IDF	Fire suppression

J.4.2 Portable Emergency Equipment

PORTABLE EMERGENCY EQUIPMENT		
Type	Location	Capability
Fire extinguishers	In motorized equipment (e.g., trucks, etc.), nearby structures (e.g., change trailers, storage buildings, etc.).	Use on any Class A, B, or C fires. (Note: Some are only B and C.) Do NOT use on sodium.
Eye wash and safety shower	TBD. Use nearest equipment as directed by management.	Assists in flushing unwanted chemical and material from clothing and body.

J.4.3 Communications Equipment/Warning Systems

COMMUNICATIONS EQUIPMENT		
Type	Location	Capability
Cell phones	Portable	Communication

NOTE Site-wide communications and warning systems are identified in Permit Attachment 4, Hanford Emergency Management Plan (DOE/RL-94-02), Table 5.1.

J.4.4 Personal Protective Equipment

PERSONAL PROTECTIVE EQUIPMENT		
Type	Location	Capability
Respirator	TBD	Protection from airborne particulates
Personal protective equipment Clothing	TBD	Personnel protection against exposure

J.4.5 Spill Control and Containment Supplies

SPILL KITS AND SPILL CONTROL EQUIPMENT		
Type	Location	Capability
Absorbents	TBD	Contain or clean up spills
Overpack containers		Provide containment for leaking or damaged containers
Shovels		O Clean up hazardous material spills
Chemical transfer pumps		P Move hazardous materials
Spill kit		Q Clean up hazardous material spills

J.4.6 Incident Command Post

The ICPs will be identified in a fixed location or the IC will determine a location appropriate for the event. Emergency resource materials will be stored at each location. The IC could activate the Hanford Fire Department Mobile Command Unit if necessary.

J.5 Required Reports

Post incident written reports will be required for certain incidents on the Hanford Site. The reports are described in Attachment 4, *Hanford Emergency Management Plan* (DOE/RL-94-02), Section 5.1.

Facility management must note in the Hanford Facility Operating record, the IDF file, the time, date, and details of any incident that requires implementation of the contingency plan (Section J.3). Within fifteen (15) days after the incident, a written report will be submitted to Ecology. The report will include at a minimum the elements specified in [WAC 173-303-360\(2\)\(k\)](#).

J.6 Plan Location and Amendments

Copies of Attachment 4 [*Hanford Emergency Management Plan* (DOE/RL-94-02)] will be maintained per permit condition I.M.1. Copies of the Building Emergency Plan and IDF Permit Addendum J.1 will be maintained at the following locations:

- MO-720
- MO-438

These documents will be available in either hard copy or electronic form.

This plan is reviewed and immediately amended as necessary in accordance with Attachment 4, *Hanford Emergency Management Plan* (DOE/RL-94-02), Section 14.3.1.1.

J.7 Facility/Building Emergency Response Organization

J.7.1 Building Emergency Director

IDF BEDs		
Title	Work Location	Work Phone
Operations Management	MO-720	373-1068

Names and home telephone numbers of the BEDs are available from the Patrol Operations Center (373-0911), in accordance with Permit Condition II.A.3.

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